

It's been 30 years since discovery of selenium's devastating impacts to wildlife at Kesterson Reservoir in the San Joaquin Valley drew national attention to a previously obscure naturally occurring contaminant.

What have we learned since then about managing selenium, and about its occurrence throughout the West?

Experts at this special Selenium Summit will address this and other key questions:

- Where is selenium a problem?
What were the outcomes of the U.S. Bureau of Reclamation's program to investigate the West-wide presence of selenium at its irrigation projects?
- What is the status of setting a new federal standard for selenium in the aquatic environment?
When would a new standard take effect?
- What water quality regulatory approaches are being used?
How do TMDLs fit in?
- How are growers managing agricultural drainage water in a post-Kesterson environment?
- If you have it, how bad is it?
What are mitigation/remediation options?

Speakers also will focus on several regional case studies:

- Managing Selenium in California's San Joaquin Valley
- Remediation Efforts in the Intermountain West
- Selenium in Estuarine Settings
- Selenium Activities in the Upper Colorado River Basin
- The Impacts of Selenium in the Lower Colorado River Basin

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WATER EDUCATION
FOUNDATION

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Selenium Summit: Problems and Solutions for the West

November 2-4 • Costa Mesa Hilton • Costa Mesa, CA
Includes a tour of Irvine Ranch Water District's San Diego Creek natural treatment wetlands

Sponsored by:



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U.S. Bureau of Reclamation,

Lower Colorado Region

U.S. Fish and Wildlife Service

U.S. Geological Survey

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Agenda

Wednesday, November 2

2:00 p.m. Depart for tour of Irvine Ranch Water District's San Diego Creek natural treatment wetlands

Thursday, November 3

8:30 a.m. Registration

9:00 Welcome and Opening Remarks

Rita Schmidt Sudman, *Executive Director, Water Education Foundation*
Jeanine Jones, *Interstate Resources Manager, California Department of Water Resources*

9:20 Overview of Selenium in the West

Selenium in the Environment

Harry Ohlendorf, *Principal Technologist, Ecological Risk Management, CH2M HILL*

Outcomes from the National Irrigation Water Quality Program

John Harb, *Manager, National Irrigation Water Quality Program*

10:30 Break

10:45 Selenium and Wildlife

Exposure to/Toxicity of Selenium in the Environment

Harry Ohlendorf, *Principal Technologist, Ecological Risk Management, CH2M HILL*

Proposed Change in Federal Aquatic Selenium Water Quality Standard

Ephraim King, *Director of the Office of Science and Technology, U.S. Environmental Protection Agency*

Process for Setting Standard for California

Steve Thompson, *Manager of California-Nevada Operations, U.S. Fish and Wildlife Service*

11:30 Lunch

Using Clean Water Act Tools to Manage Selenium

Wayne Nastri, *Regional Administrator, U.S. Environmental Protection Agency, Region 11*

1:00 p.m. Managing Selenium in California's San Joaquin Valley

Selenium Management in U.S. Bureau of Reclamation's

DEIS for SJV Drainage Program

Mike Delamore, *Chief, San Joaquin Drainage Division South-Central California Area Office*
U.S. Bureau of Reclamation

Summary: Selenium Removal Work at Adams Avenue Research Center

José Fariá, *Coordinator, Agricultural Drainage Program, California Department of Water Resources*
San Joaquin District

Managing Tulare Lake Basin Evaporation Ponds to Limit

Wildlife Exposure

Doug Davis, *General Manager, Tulare Lake Drainage District*

San Joaquin Valley Evaporation Ponds Oversight

Anthony Toro, *Water Resources Control Engineer, Central Valley Regional Water Quality Control Board*

Grasslands Bypass Project

Joe McGahan, *President, Summers Engineering*

2:40 Selenium in Estuarine Settings

Selenium in San Francisco Bay Biota

Sam Luoma, *Senior Research Hydrologist, U.S. Geological Survey*

San Francisco Bay Model

Theresa Presser, *Research Chemist, National Research Program, U.S. Geological Survey*

Natural Treatment Wetlands on San Diego Creek

Paul Jones, *General Manager, Irvine Ranch Water District*

3:30 Break

3:45 Remediation Efforts in the Intermountain West

Selenium Mitigation at Reclamation's Kendrick Project in the Platte River Basin

Laurel Graham, *Casper-Alcova Irrigation District*

Montana's 2004 TMDLs for Selenium in the Sun River Planning Area

Dartin Kron, *Water Quality Specialist, Montana Department of Environmental Quality*

Selenium Issues at the Great Salt Lake

Walt Baker, *Director, Utah Division of Environmental Quality**

Selenium's Role in Southeast Idaho's Human and Ecological Health

Rick Clegg, *Selenium Project Manager, Idaho Department of Environmental Quality**

5:00 Reception

Sponsored by Irvine Ranch Water District

Friday, November 4

8:30 a.m. Activities in the Upper Colorado River Basin

Selenium and the Colorado River Basin Salinity Control Forum

Jack Barnett, *Executive Director, Colorado River Basin Salinity Control Forum*

Reducing Selenium Loads and Concentrations in the Colorado and

Gunnison Rivers

Sonja Chavez de Baca, *Coordinator, Gunnison Basin & Grand Valley Selenium Task Forces*

Selenium Remediation at Stewart Lake Wildlife Management Area,

Green River Basin

David Natfz, *Research Hydrologist, Water Resources Discipline, U.S. Geological Survey, Utah Science Center*

9:45 Break

10:00 Impacts of Selenium in the Lower Colorado River Basin

Occurrence of Selenium at the Salton Sea

Doug Barnum, *Acting Chief Scientist for the Salton Sea Office, U.S. Geological Survey*

Implications of Selenium for Salton Sea Restoration

Gwen Buchholz, *CH2M Hill*

Selenium in the Mexican Delta

Jaqueline García-Hernández, *Research Center for Food and Development*

Pollutant Trading Program for Selenium

Bruce Zander, *TMDL Coordinator, U.S. Environmental Protection Agency, Region 8*

11:30 Environmental Management Issues

Ecological Risk Assessment

Joseph Skorupa, *Clean Water Act Biologist, Environmental Contaminants Branch, U.S. Fish and Wildlife Service**

Effectiveness of Wildlife Exclusionary Techniques

Terrell Salmon, *Professor, University of California, Davis**

12:00 p.m. Adjourn

**Invited*

Conference Info

Conference Fee and Registration

The Selenium Summit will be held at the Costa Mesa Hilton, 3050 Bristol Street, Costa Mesa, CA. Shuttle transportation from John Wayne Airport in Orange County to the hotel is available. Car rental and taxi services also are available at the airport.

Registration for the summit is \$195. This fee includes Wednesday's tour of Irvine Ranch Water District's San Diego Creek natural treatment wetlands, lunch and a hosted reception on Thursday, and continental breakfasts Thursday and Friday. **Some scholarships are available.** Contact Rita Schmidt Sudman, 916-444-6240, for information.

Hotel Reservations

You may contact the Costa Mesa Hilton at 714-540-7000. We have reserved a limited number of rooms for Nov. 2 and 3 at the special group rate of \$119 per night, plus taxes and surcharges. (This special rate is available until Oct. 10.) To request the group rate, be sure you mention the Water Education Foundation.

Cancellation Policy

Refunds (less a \$25 administration fee) will be given to registrants if written notice is received by 5 p.m. Oct. 21. Substitutions may be made at any time. No refunds after Oct. 21.

Registration

Selenium Summit: Problems and Solutions for the West November 2-4, 2005

Name(s) _____

Title(s) _____

Affiliation _____

Address _____

City _____ State _____ Zip _____

Phone/Email _____

Thursday Lunch Choice: ☐ Chicken ☐ Beef ☐ Vegetarian

☐ Yes, I want to attend the San Diego Creek tour on Nov. 2 (*seating is limited*)
☐ Enclosed is my \$195 registration fee. Some scholarships are available – contact the Foundation for more information.

Faxed reservations accepted with credit card or purchase order
☐ Visa ☐ American Express ☐ MasterCard ☐ Purchase Order

Card number _____ Exp. Date _____

Signature _____

(must be signed to process credit card order)